

CLAIMS

1. Formwork for concrete wall including two parallel formwork walls (1, 1') placed facing each other provided with shaped bars forming the vertical stiffeners (2, 2') and connected by at least one articulated connection device allowing the formwork walls (1, 1') to be maintained either at a distance defining a space to receive a filler such as concrete, or folded for storage and transport, **characterized in that** the connection device includes a rectilinear horizontal first bar (3) parallel to the first formwork wall (1) and passing through the stiffeners (2) of said first wall (1), a second rectilinear horizontal bar (3') parallel to the second formwork wall (1') and passing through the stiffeners (2') of said second wall (1'), said second bar (3') being situated facing the first bar (3), and a plurality of connection bars (4) linking perpendicularly the two horizontal bars (3, 3'), said connection bars (4) being articulated around said horizontal bars (3, 3').
2. Formwork according to claim 1 **characterized in that** the stiffeners (2, 2') of the formwork walls (1, 1') facing each other are generally U-shaped and are placed opposite each other and that the connections bars (4) are placed between the lateral sides of the U-shaped sections of two stiffeners (2, 2') which are opposed and articulated around the horizontal bar part (3, 3') situated between these sides.
3. Formwork according to claim 1 **characterized in that** the stiffeners (2, 2') of a formwork wall (1, 1') are out of line in comparison with those of the fronting wall, and that one of the ends of a connection bar (4) is articulated between the lateral sides of the U-shaped section of a stiffener (2, 2') while the other end is articulated around a part of the opposed horizontal bar (3, 3') situated between two stiffeners (4).

4. Formwork according to claims 1 to 3 **characterized in that** the stiffeners (2, 2') of the formwork walls (1, 1') are spaced at approximately regular intervals on the length of the formwork walls (1, 1').
5. Formwork according to claims 1 to 4 **characterized in that** the horizontal bars (3, 3') are spaced at approximately regular intervals on the height of the formwork walls (1, 1').
6. Formwork according to claims 1 to 5 **characterized in that** the stiffeners (2, 2') include holes on each lateral side of the U-shaped section, said holes are positioned one facing the other on each lateral side and facing those of the lateral sides of the near stiffeners in such a way that they allow a horizontal bar to slide freely (3, 3') when it goes through each stiffener (2, 2') of the formwork wall (1, 1').
7. Formwork according to claims 1 to 6 **characterized in that** the connection bars (4) include a hole at each end by which the horizontal bar (3, 3') passes freely by carrying out the articulation of said connection bar (4) around said horizontal bar (3, 3').
8. Formwork according to claims 1 to 6 **characterized in that** the connection bars (4) include curved ends (12, 12') which roll-up around the horizontal bars (3, 3').
9. Formwork according to claim 8 **characterized in that** at least one of the ends of the connection bars (4) is rolled-up around the horizontal bar part (3, 3') which is between the lateral sides of the U formed by the stiffeners (4, 4') of one of the formwork walls (1, 1').
10. Formwork according to claims 1 to 9 **characterized in that** the connection bars (4) are positioned at approximately regular intervals in the length direction as well as in the height direction of the formwork walls (1, 1').

11. Formwork according to claims 1 to 10 **characterized in that** the size of the stiffeners (2, 2'), the horizontal bars section (3, 3') and/or the connection bars section (4) is adapted according to the stress resistance requirements that the wall built with said formwork must meet.
12. Formwork according to claims 1 to 11 **characterized in that** it includes a framework (5) disposed in the spaces delimited by the connection bars (4) and by the formwork walls (1, 1'), said framework (5) includes at least two vertical bars (7) having the height approximately equal to the height of the formwork and a plurality of horizontal bars (6) linking the two vertical bars (7).
13. Formwork according to claim 12 **characterized in that** the framework (5), which is of floating type, is situated in a central zone of the space that it occupies between the formwork walls (1, 1') and the connection bars (4).
14. Formwork according to claims 12 and 13 **characterized in that** the framework (5) is maintained, by means of a fastening device as hooks (8) or fasteners, either on the horizontal bars (3, 3'), or on the connection bars (4) of the last connection device of the upper part of the formwork.
15. Formwork according to claims 1 to 14 **characterized in that** it includes an insulating panel (9) situated between the stiffeners (2, 2') and one of the formwork walls (1, 1'), said insulating panel (9), extending on the whole surface of the formwork wall (1, 1'), is fixed at the back of the stiffeners (2, 2') by means of screws or fasteners (10) which, going through the panel (9), maintain the formwork wall (1, 1') against the stiffeners (2, 2').